10

15

20

25

WHAT IS CLAIMED IS:

- Y. A system for mapping addresses of SCSI devices, comprising:
- a plurality of storage area networks on which is located at least one device and/or at least one host; and
- a storage area network extender that connects said at least two storage area networks over a packet-based network, wherein at least one host on any storage area network is operable to access at least one device located on any storage area network of said plurality of storage area networks.
- 2. The system for mapping addresses of SCSI devices of Claim 1, wherein said storage area network extender seamlessly interconnects said at least two storage area networks.
- 3. The system for mapping addresses of SCSI devices of Claim 2, wherein said plurality of storage area networks are geographically distinct.
- 4. The system for mapping addresses of SCSI devices of Claim 1, wherein said storage area network extender further comprise a plurality of nodes.
- 5. The system for mapping addresses of SCSI devices of Claim 4, wherein within said nodes, device addresses are mapped to an intermediary device

identifier, which in turn is mapped into an address accessible by said host.

- The system for mapping addresses of SCSI devices of Claim 5, wherein said nodes comprise a Fibre channel-to-SCSI router.
- The system for mapping addresses of SCSI 7. devices of Claim 5, wherein said intermediary device identifier comprises:
 - a node identifier; and
 - a generic device identifier.
- The system for mapping addresses of SCSI devices of Claim 5, wherein each of said nodes is operable to inform said plurality of nodes of said at least one device located on said storage area network to which said node is interfaced.
- The system for mapping addresses of SCSI 9. devices of Claim 5, wherein said plurality of storage area networks communicate via an encapsulation protocol.

C:3

5

10

15

10

15

20

10. A method for mapping addresses of SCSI devices, comprising the steps of:

identifying a host located on a first storage area network;

identifying a device located on at least one additional storage area network;

interconnecting said first storage area network with said at least one additional storage area network via a transport layer;

mapping a device address into an intermediary
device identifier; and

mapping said intermediary device identifier into an address accessible by said host.

- 11. The method of Claim 10, wherein an interface between said transport layer and said first storage area network or said at least one additional storage area network comprises a node.
- 12. The method of Claim 11, wherein said step of mapping a device into said intermediary device identifier takes place at each node.
- 25 13. The method of Claim 11, wherein said step of mapping said intermediary device identifier into an address accessible by said host takes place at each node.



14. The method of Claim 11 wherein said nodes comprise a Fibre channel-to-SCSI router.

- 15. The method of Claim 14, wherein said intermediary device identifier comprises:
 - a node identifier; and
 - a generic device identifier.
- 16. The method of Claim 15, wherein saidtransport layer comprises a packet-based network.
 - 17. The method of Claim 11, wherein said storage area networks are geographically distinct.

10

15



- 18. A system for mapping addresses of SCSI devices, comprising:
- a SCSI device located on a first storage area networks within a plurality of storage area networks;
- a host located on a second storage area network within said plurality of storage area networks; and
- a plurality of nodes that connect said plurality of storage area networks to a packet-based network, wherein said nodes seamlessly interconnect said plurality of storage area networks, allowing said host to access said device.
- 19. The system for mapping addresses of SCSI devices of Claim 18, wherein within said nodes device addresses are mapped to an intermediary device identifier, which in turn is mapped into an address accessible by said host.
- 20. The system for mapping addresses of SCSI devices of Claim 18, wherein at least a pair of said storage area networks within said plurality of storage area networks are geographically distinct.
- 21. The system for mapping addresses of SCSI devices of Claim 18, wherein said nodes comprise a Fibre channel-to-SCSI router.

The first first the street of the street of



- 22. The system for mapping addresses of SCSI devices of Claim 18, wherein said intermediary device identifier comprises:
 - a node identifier; and
 - a generic device identifier.

T'Abbo